

DEPARTMENT OF THE ARMY
INSTALLATION MANAGEMENT COMMAND HEADQUARTERS, UNITED STATES ARMY
GARRISON FAMILY & MORALE, WELFARE AND RECREATION
PICATINNY, NEW JERSEY 07806-5000

STANDARD OPERATING PROCEDURE
NO 215-20

4 February 2010

Family and Morale, Welfare, and Recreation
Paintball Program

SUBJECT: FMWR PAINTBALL PROGRAM

1. PURPOSE: To establish the policies and procedures for the Paintball program for Picatinny Arsenal Outdoor Recreation Branch. For Active Military and post employee DoD Civilians – the above personnel can sponsor any person – see sponsor forms for more details.
2. GENERAL: All personnel will follow set procedures to ensure the rules of the course are enforced and that the equipment being issued and returned is accounted for properly. Players between the ages of 13-17 must have a parent or guardian present to sign. No child under 13 is authorized to participate or allowed on site. The Game Course/range will be ADA accessible (i.e, Wounded Warrior). Paintball rules are presented at the end of this document.
3. GAME PROCEDURES:
 - a. Games will be by appointment only through the Outdoor Recreation office after the time requested has been approved and fees have been collected. Players needing rental equipment and gear would secure availability at the time of course appointment. Pick up of gear will be the same day as range use and then the teams meet at the staging area located at Lake Denmark parking lot. (Players may bring their own equipment.)
 - b. Players bringing their own paintball marker need to chronograph their markers to ensure that they are set at the specified field velocity (no faster than 280 ft. /second).
 - c. Prior to entering the staging area the Range Officers will brief the players on rules, course layout and conduct of the course. The Range Officers will direct teams to the staging area for final preparation for the game and give final instructions with monitors in place. After the game, Range Officers will clear the course and have the players report to the staging area and return equipment.
 - d. Upon return of rental equipment, the items again will be inspected by the Range Officer(s), and any excess damage will be noted on the inspection form with beyond normal use, and a damage fee will be assessed. Range Officers will ensure that all equipment is accounted for and properly secured.
 - e. PPE – Personal Protective Equipment (PPE) will be per the Composite Risk Worksheet, but at a minimum paintball mask (required), gloves, neck and groin protection (optional). All personnel will wear all PPE required at all times while on the playing field.
 - f. Range Officer will have final decision on all game actions. Qualification of Range Officers can be found in the Outdoor recreation webpage. Range Officers must be a minimum age of 18. Medical Release form and minor forms will be signed off and the Range Officer will be the responsible party for all forms.

The following Range Officers protocol will be in place at Picatinny:

The ratio of players to range officers shall be no greater than 10:1. If the ratio exceeds this then more range officer support is need.

All Range officers will have CPR/First Aid Training. First Aid kit will be on range at all times during any game.

All Range Officers will have formal documented training.

Before every game, a safety briefing will be held, and all personnel will go over the rules sheet and initial each rule.

Any infraction shall be cause the removal of that person from the game.

g. Signs will be posted at 50 foot intervals warning of the paintball range and the game in play

h. Any entrance of unauthorized personnel stops all paintball activities.

4. RESPONSIBILITIES: The Range Officer(s) have the responsibility for ensuring that the patrons follow this SOP.

5. The FMWR proponent for this SOP is the Outdoor Recreation Manager. All participant release forms are located on Outdoor recreation Web Page:

<http://www.pica.army.mil/outdoor/Paintball.html>

6. Follow NJ Standards.

7. Register all markers with Police (PICA).

8. General Safety Requirements:

1. Paintball Marker should only be operated by personnel who have received proper training for the operation of the equipment. Refer to operators' manual for startup and firing procedure. Follow all manufacturers' safety guidelines.
2. Paintball Marker operators shall read and always follow this safety SOP.
3. Only Paintball Markers with a muzzle velocity of 280 ft/s (91 m/s) or less are authorized for use at Picatinny Arsenal for Paintball games.
4. Operate only in Paintball Marker-approved areas. Anyone inside the Paintball Range shall wear approved PPE (i.e. paintball mask (required), gloves, neck and groin protection (optional)), any time a game is in progress.
5. All personnel involved in any paintball activity and/or operation of the Paintball Marker shall use approved PPE while testing or working with these devices. The Markers will only be fired on the paintball range and at all other times the barrel will be covered by a barrel plug or sock
6. The Paintball Marker shall not be operated or experimented with outside the Paintball Marker-approved area unless it is specifically authorized. The Paintball Marker barrel will be covered by a barrel plug or sock when the Paintball Marker is located outside the Paintball Marker-approved area.
7. Positively identify the range areas prior to Paintball game operations to insure the

prevention of any accidental entry into the hazard zones outside of the range.

8. Personnel shall keep their paintball mask on at all times when in the Paintball range.
9. Never look down the barrel of a Paintball Marker.
10. Never assume that a Paintball Marker is empty. Always treat every Marker as if it is loaded and has compressed gas in the valve. It is possible to take the gas bottle off the gun while leaving the valve containing compressed gas. Barrel socks shall remain on even when the Paintball Marker is not in use.
11. Always use caution and don PPE when removing air tank for gun. (Range officers only)
12. Never use a damaged High Pressure Air (HPA) tank or damaged CO2 tank.
13. Do not point a Paintball Marker at anyone unless an authorized game is under way and they are using PPE. All personnel must be briefed and part of the game so they are informed they might be hit by paintballs. Unauthorized individuals should never wander into the target area without appropriate protection. If any unauthorized individual wanders into the target area all paintball game operations will cease. (Range Officers will warn players of dangers on the field)

Personnel:

Paintball Marker Operator
Range Officer

Materials Needed:

1. Signs delineating Paintball Range and warning others to stay out
2. Paper Towels/regular towels
3. Paintball Marker (gun)
4. Barrel Plug or sock
5. Safety Gloves (optional)
6. Paintball mask
7. Neck protection (optional)
8. Groin protection (optional)
9. Paintball Hopper
10. Paintball Marker Squeegee (Range Officers have in their possession optional for players)
11. Paintball Marker lubricating oil (maintenance handled by range officers only)
12. High Pressure flex hose w/ quick disconnect (optional, N/A on rentals)
13. AC Power supply for paintball Marker and/or 9V battery (optional, N/A on rentals)

Operation 1: Pre-Setup for Tippmann A-5 Markers only

Operators: Based on Range Officer's discretion

Range Officer: 1

Note:

1. All personnel will don paintball mask prior to handling paintball Marker. (if HPA is attached)
2. At this point, Paintball Marker will be un-cocked and barrel shall be plugged so there is no risk of fire while handling.

Steps:

1. This step is for markers with e-triggers only:
Range officer will ensure that paintball Marker is in good working condition and will test that power supply (9V battery or AC source) activates Green LED. Operator will then ensure Marker is in SAFE mode.
2. Range Officer will ensure that hydro-testing date on HPA tank has not expired and that the O-ring is not cracked or deformed.
3. Attach HPA canister to paintball Marker.
 - i. Screw on HPA canister directly to paintball Marker.
4. When HPA flows through system, listen for leaks. If there are audible leaks see Operation 4: Maintenance – Air System Maintenance.

Operation 2: Firing Paintball Marker

Operators: Based on Range Officers discretion

Range Officer: 1

Note:

1. All operators will don paintball mask.

Steps:

1. Range Safety Officer will ensure that everyone inside the Paintball Range is wearing appropriate PPE and will stand guard to make sure no one without PPE accidentally enters the range.
2. Operator will then load paintballs into hopper.
3. Operator will unplug barrel and set aside.
4. Operator will then disengage safety switch, and engage in game.
5. When tagged or marked out or at the end of a game, the operator will engage the safety switch, plug barrel, and place the Paintball Marker on flat surface with barrel pointing away from any personnel or test subject.

Operation 3: Clean Up

Operators: Range Officer only

Range Officer: 1

Note:

1. All personnel will don paintball mask prior to handling paintball Marker.
2. HPA tank shall be removed from marker prior to clean up by unscrewing the tank.

Steps:

1. Range Officer will pick up Paintball Marker, remove the barrel sock, and disengage safety switch. Aim at the ground and pull the trigger.
2. Next ensure Paintball Marker is in SAFE position, plug barrel, and remove power supply from Marker (if applicable).
3. Marker, barrel and HPA tank will be cleaned of paint, oil and any foreign debris.

Operation 4: Maintenance

Operators: Range Officer only

Range Officer: 1

Firing Mechanism Maintenance:

Note:

1. Paintball Marker will be unplugged from any electric power source (if applicable), disconnected from any HPA supply, and switched to the SAFE mode.
2. All personnel will don paintball mask prior to handling paintball Marker (if HPA is attached to the marker).
3. Work area will be free of debris and dirt as to not contaminate inner mechanisms of Paintball Marker.

Materials needed for cleaning and maintenance:

1. Tippmann A-5 marker
2. A-5 marker manual and schematic.
3. Marker lubricant.
4. Complete Repair and Rebuild Kit.
5. Squeegee
6. Paper towels
7. Allen wrench set
8. Screw driver (Flat head)

Steps:

Follow manufacturer instructions based on the Paintball Marker Tippmann A-5.

1. Remove barrel plug/sock, hopper and barrel. Be sure to remove any paintballs in the hopper out before removal. Clean the barrel with a squeegee if necessary.
2. Ensure the marker is un-cocked. Begin to remove push pins from the body of the marker. Ensure that all pins are accounted for. Use the schematic for reference. (Page 18 in the Tippman A-5 Manual). Once all push pins are out, take out the receiver bolts and the feeder housing bolt. Take the end cap assembly, guide pin, rear bolt plug and drive spring.
3. Slide front sight out before taking the receiver off. Remove the Tombstone adapter by placing your thumb on the tombstone latch and pulling towards the end cap and pull the tombstone adapter away from the marker. Now you can set the trigger assembly aside. Remove banjo fitting screw from the receiver. Remove the Cyclone feeder and inspect the O-ring on the banjo fitting. Put a drop of oil there to ensure liberation on the O ring. Push reset button to ensure all moving parts are functioning as they should. Oil moving parts inside of the Cyclone feeder assembly and the banjo fitting O- ring. Make note of the number on the marker put there by ODR.
4. Take the receiver plate off. Be sure not to lose the sear spring and tombstone latch. It is safer to take out the latch and leave the sprig in the cavity of the receiver where the latch was resting to prevent losing the spring all together. Inspect the tombstone latch for cracks, Replace if it is cracked.
5. Visually inspect the O-rings on upper bolt for cracks or deformities and replace as needed. Add 2-3 drops of lubricating oil on all O-rings (old and new) and wipe off excess with paper towel.

6. Visually inspect entire bolt mechanism for dirt and debris and wipe off/clean with paper towel as necessary. If bolt has visible yet small marks of wear, add 1-2 drops of lubricating oil to worn areas. If bolt is damaged, replace.
7. Inspect the ball latch for cracks or dry rot. If damaged replace.
8. Inspect the cocking handle and spring to ensure they will work properly. Replace if damaged.
9. Inspect all O-rings and components from the Barrel adapter to the Rear bolt. Lubricate all of the O-rings that are in that system. Remove the linkage arm for better access to the bolt and power tube assemblies.
10. After inspecting and cleaning and oiling all of the necessary components, assemble the marker. Note: moving parts should be lubricated and the inside of the receiver should have a few drops applied.
11. Place the Tombstone Adapter and latch into the marker. Be sure to line up the seams of the receiver to ensure no springs or O-rings will be damaged. Once the receiver is aligned, slide the front site into place and screw in the receiver bolts only hand tight.
12. Inspect the trigger assembly by taking the safety out. Note: if this is an e-trigger components will be different and there will be a power source. Be sure to remove the battery beforehand. Lubricate all of the moving parts of the trigger to ensure less wear and tear on the components. If component is damaged, replace.
13. Place trigger assembly back into the lower receiver and inspect the safety o-ring (red) if missing or damaged replace. Line up the lower assembly and trigger component and slide the safety back into place; this will lock the trigger assembly in the lower receiver.
14. Slide lower receiver into the receiver lining up the push pin holes. Slide the rear bolt plug, drive spring and guide pin back into the Marker and place end cap back on. Secure by inserting the push pins into the marker.
15. Cock the marker and test fire it to make sure all spring components are working. (Note: Dry fire only don't attach HPA)
16. Place the cyclone feeder back onto the marker. Screw in the banjo fitting. Don't over tighten or pinch the cylinder hose. Once the banjo fitting is secure flip marker over and insert the feeder housing bolt.
17. Visually inspect exterior of barrel (taking special note of threads) and wipe off any dirt or debris with paper towel.
18. Screw barrel back onto paintball Marker and insert barrel plug back into barrel. Place hopper back onto the marker and put away in its respected area.
19. Clean up work station when job is completed. Put all safety equipment and tools away.

Air system Maintenance:

Note:

1. Visually inspect HPA canister and ensure that O-ring has no cracks or deformities (replace if needed but do NOT use lubricating oil)
2. Visually inspect that hydro-testing date has not expired
3. All personnel will don paintball mask prior to handling paintball Marker. (if HPA is attached)

Steps:

1. Check HPA Canister and ensure canister has close to (but not exceeding) 3000psi of compressed air (if applicable). If not, see Fill Procedures.
2. Air Maintenance of Mobile Paintball Markers
 - a) Connect tank directly to paintball Marker.
 - i. If no audible sounds of air leaks can be heard, paintball gun air system is working and tank can be unscrewed from paintball Marker.
 - ii. If audible sounds are heard from Marker, replace parts IAW with owner manual.

HPA Canister Fill Procedures:

Note:

1. Visually inspect HPA canister and ensure that O-ring has no cracks or deformities (replace if needed but do NOT use lubricating oil)
2. Visually inspect that hydro-testing date has not expired
3. All personnel will don safety glasses and hearing protection prior to handling paintball Marker.
4. Large HPA tank(s) will be secured to wall with chain and strapping.
5. All valves will be closed.

Steps:

1. Turn on the large HPA tanks by turning the valve counter clock wise. Monitor the pressure to the input fill gages to read 4500psi or less
2. Adjust pressure to the output regulator to be 3000psi or as suggested on the HPA canister on the paintball marker.
3. Attach output quick disconnect hose to the fill nipple on the HPA canister.(HPA canister can be still attached to the marker if need be)
4. Make sure the hose is connected properly by tugging gently on the hose near the nipple and disconnect.
5. One hand shall secure the quick disconnect to the HPA tank while filling.
6. Turn the psi gage on the tank to face away from you in a visibly safe direction and hold the release valve knob down on the fill station.
7. Fill the tank to the recommended pressure indicated on the tank and release the valve knob on the fill station.
8. Once the system purges the quick disconnect can be released from the nipple on the filled paintball HPA canister.
9. Close main valve located on top of large HPA tank by rotating clock wise.



Outdoor Recreation Paintball Rules

Picatinny Arsenal, NJ

1. Field paint only. There is no outside paint. Unused field paint may be used for future play. _____
2. All personal paint markers entering and leaving building 3800 must be in a container. _____
3. Altercations/profanity will not be tolerated. Conduct yourself in a good sportsmanship manner. _____

STAGING AREA SAFETY RULES

1. Barrel plugs in guns at all times. _____
2. No dry firing in staging area. _____
3. Rental equipment cannot leave the staging area. _____
4. Rental customers may not remove HPA bottles from guns or attempt any repairs. _____
5. NO HORSEPLAY in staging area, i.e. pointing guns at other people, running, wrestling, etc. _____

PLAYING FIELD RULES

1. Goggles must be on at all times on the field.
2. If your goggles fog up or if your vision is impaired during play, do not lift or wipe the lens, yell out "BLIND PLAYER", and stay where you are until the referee arrives. _____
3. Barrel plugs are to remain in gun at all times until the referee commands "BARREL PLUGS OUT" for the start of the game. _____
4. When you are out of the game or the game is over, IMMEDIATELY insert the barrel plug and yell "DEAD MAN". You are eliminated from the game if you or any part of your gun is hit by a shot the size of a quarter or larger. If you aren't sure if you are hit you can call for a PAINT CHECK. You can also call for a paint check on another player. _____
5. NO BLIND FIRING. You must be looking at what you are shooting.
6. No shooting outside the field area. Anyone caught doing so will be responsible for damages and field's loss of revenue.
7. Hot guns are not authorized.
8. Any player caught readjusting the velocity on the field will be removed for the day. NO REFUNDS. NO EXCEPTIONS. _____
9. 3 shot rule: Players must not shoot another player more than 3 times without giving them a chance to yell DEAD MAN. _____
10. SURRENDER RULE: When within 5 feet you must give opponent a chance to surrender. _____

I HEREBY AGREE AND UNDERSTAND THE ABOVE RULES AND ACKNOWLEDGE THE RECEIPT OF THE REFERENCED SAFETY RULES. I HAVE READ EACH AND EVERY ITEM LISTED AND INITIALED. I AGREE TO ABIDE BY THE SAFETY RULES.

Participant's Name (print) _____

Participant's Signature _____

Parent/Guardian Signature _____